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IN THE CLAIMS:

1. (currently amended) A control system for a vehicle comprising:
a GPS system generating a vehicle position signal for a vehicle relative to a surface;
a plurality of driver inputs;
a plurality of vehicle sensors each providing a vehicle input; and
a controller coupled to the GPS system, the plurality of driver inputs and the plurality of vehicle inputs, said controller determining a predicted path in response to the plurality of driver inputs and the vehicle inputs, and determining a desired path in response to the GPS system, said controller performing a comparison of the predicted path and the desired path, said controller generating a control signal in response to the comparison,
wherein said controller performs the comparison using colinearity of a confidence level, or a linear regression model with said threshold corresponding to an estimated error.
2. (cancelled)
3. (cancelled)
4. (original) A control system as recited in claim 1 wherein the linear regression model is a function of pitch angle, yaw angle and vehicle speed.
5. (previously presented) A control system as recited in claim 1 wherein the plurality of vehicle inputs includes a vehicle speed.
6. (original) A control system as recited in claim 1 wherein the pitch angle and yaw angle are determined in the GPS receiver.

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7. (original) A control system as recited in claim 1 further comprising an audible indicator, said audible indicator operating in response to the control signal.

8. (original) A control system as recited in claim 1 further comprising a visual indicator, said visual indicator operating in response to the control signal.

9. (original) A control system as recited in claim 1 further comprising an intervention module, said intervention module operating in response to the control signal.

10. (currently amended) A control system as recited in claim [[1]]
9 wherein the intervention module generates a vehicle speed restriction.

11. (currently amended) A control system as recited in claim [[1]]
9 wherein the intervention module generated generates a change in a center of gravity by controlling a suspension component.

12. (currently amended) A control system as recited in claim [[1]]
9 wherein the intervention module generated generates a change in a center of gravity by controlling a shock absorber.

13. (currently amended) A control system as recited in claim [[1]]
9 wherein the intervention module generates a steering angle change.

14. (currently amended) A control system as recited in claim [[1]]
9 wherein the intervention module generates a gas tank load shift.

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15. (original) A control system as recited in claim 1 further comprising a road condition input, said controller generating the predicted path in response to the road condition input.

16. (currently amended) A control system for a vehicle comprising:

a driving condition database having driving conditions therein;

a GPS system generating a vehicle position signal for a vehicle relative to a surface;

a plurality of driver inputs;

a plurality of vehicle sensors each providing a vehicle input; and

a controller coupled to the GPS system, the plurality of driver inputs and the plurality of vehicle inputs, said controller determining a predicted condition in response to the plurality of driver inputs, the vehicle inputs and the driving conditions, and determining a desired condition in response to the GPS system and the driving conditions, said controller performing a chaos-theory based comparison of the predicted path and the desired path, said controller generating controlling an intervention module or an indicator in response to the comparison,

wherein said controller performs the chaos theory based comparison using colinearity of a confidence level, or a linear regression model with said threshold corresponding to an estimated error.

17. (original) A control system as recited in claim 16 wherein the predicted condition comprises a predicted path and the desired condition comprise a desired path.

18. (cancelled)

19. (cancelled)

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20. (currently amended) A control system as recited in claim [[19]] 16 wherein the linear regression model is a function of pitch angle, yaw angle and vehicle speed.

21. (cancelled)